
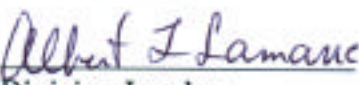
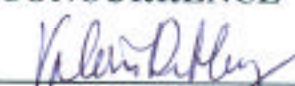



LLNL Environmental Restoration Division (ERD) Standard Operating Procedure (SOP)	
ERD SOP 4.15: ERD Self-assessments and Walk-about	
REVISION: 0 	AUTHOR: V. Dibley REVIEWERS: A. Lamarre, J. Steenhoven, and J. Merrigan
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APPROVAL Date  <u>2/8/00</u> Division Leader	CONCURRENCE Date  <u>1/7/00</u> QA Implementation Coordinator
CONCURRENCE Date  <u>01/24/00</u> EPD Assurance Manager	

1.0 PURPOSE

The purpose of this SOP is to describe the steps ERD personnel are to take when performing self-assessments and walk-about. The purpose of the self-assessments is to improve quality and ensure compliance with all procedural, QA, and ES&H requirements. The purpose of the walk-about is to establish a means for the ERD Management to observe and interact with ERD personnel in the work environment.

2.0 APPLICABILITY

This procedure is applicable to all ERD quality-affecting activities.

3.0 REFERENCES

3.1 Laboratory Site Operations Environmental, Safety and Health Self-assessment Plan.

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- 3.2 LLNL Environmental, Safety and Health Deficiency Tracking System (DefTrack) Users Manual.
- 3.3 ERD Management Walk-About Policy.
- 3.4 Memorandum from Jim Merrigan dated 9/25/97 regarding Guidance on EPD DefTrack Verifications.

4.0 DEFINITIONS

See SOP Glossary.

5.0 RESPONSIBILITIES

5.1 Division Leader (DL) or Deputy Division Leader (DDL)

The DL or DDL is responsible for establishing an ERD management walk-about schedule, performing the walk-about, writing a summary, and determining follow-up. The DL/DDL may also participate in the ERD QA/Management self-assessments.

5.2 Group Leader (GL)

The GL is responsible for establishing a walk-about schedule, performing the walk-about, writing a summary, and determining follow-up for those activities within their group's purview. The GL may also participate in the ERD QA/Management self-assessments.

5.3 ERD ES&H Coordinator

The ERD ES&H Coordinator is responsible for tracking the LSO self-assessment due dates and requesting scheduling from the Hazard Control ES&H Teams. The ERD ES&H Coordinator is also responsible for DefTrack entry of the LSO self-assessments and tracking deficiencies to closure.

5.4 ERD Quality Assurance Implementing Coordinator (QAIC)

The ERD QAIC is responsible for coordinating and participating in the ERD QA/Management self-assessments, writing the assessment reports, and maintaining the ERD Self-assessments Schedule and ERD Assessment Database.

5.5 Hazards Control ES&H Team

The ES&H Team is responsible for performing the LSO facility self-assessments and providing a report for DefTrack.

5.6 ERD Facility Point of Contact (FPOC) or Responsible Individual (RI)

The FPOC/RI or designee is responsible for accompanying the self-assessment team and resolving any deficiencies or questions.

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6.0 PROCEDURES

ERD assesses division activities by performing self-assessments. Environmental, Safety and Health (ES&H) self-assessments and walk-about are required by the Laboratory Site Operations (LSO) ES&H Self-assessment Plan. Quality Assurance (QA) self-assessments are required by the ERD QA Project Plan.

6.1 LSO ES&H Self-assessments

The LSO ES&H Self-assessment Plan self-assessments are divided into Focus Areas and Facilities. The EPD Assurance Office coordinates the assessment of the Focus Areas, therefore, that process will not be covered by this procedure. The following steps describe how the Facilities are assessed by ERD.

- 6.1.1 The LSO ES&H self-assessments are performed per the schedule contained in the LSO ES&H Self-assessments Plan.
- 6.1.2 The ERD ES&H Coordinator reviews the LSO Self-assessment Plan schedule and determines what facilities need to be assessed to meet the Plan.
- 6.1.3 The ERD ES&H Coordinator contacts the appropriate Hazards Control ES&H Team (Team 1 for Site 300 and Team 4 for Livermore Site) and requests the facilities to be scheduled for inspection.
- 6.1.4 The ERD ES&H Coordinator works with the ES&H Team and the ERD Facility Point of Contact (FPOC) to determine an acceptable inspection date.
- 6.1.5 The FPOC accompanies the Team on the inspection. Whenever possible, a close-out meeting with the ES&H Team is conducted at the conclusion of the assessment to review any issues for factual accuracy.
- 6.1.6 The ES&H Team completes the inspection report and forwards a copy to the EPD Assurance Office who forwards it to the ERD Division Leader who forwards it to the ERD ES&H Coordinator.
- 6.1.7 The ERD ES&H Coordinator adds the inspection to DefTrack. Any ES&H deficiencies are forwarded to the appropriate personnel for resolution. The ERD ES&H Coordinator monitors DefTrack until any deficiencies are satisfactorily completed. The DefTrack item is then closed out after verification by the appropriate personnel (see Reference 3.4). The self-assessment is also recorded in the ERD Assessment Data spreadsheet maintained by the ERD Quality Assurance Implementing Coordinator (QAIC).

Note: See Reference 3.2 for DefTrack procedures.

6.2 ERD QA and Management Self-assessments

- 6.2.1 The ERD self-assessments are performed at a frequency documented in the ERD Self-assessments Schedule maintained by the ERD QAIC.
- 6.2.2 The ERD QAIC reviews the ERD Self-assessments Schedule and determines what quality-affecting activities need to be assessed.

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- 6.2.3 The ERD QAIC then contacts a member of the ERD Management Team (Group Leaders and above) and the responsible person for the activity to schedule the assessment.
- 6.2.4 The ERD QAIC reviews the self-assessment checklist for the activity and updates it if necessary. The checklist should include questions regarding applicable procedures, QA, Safety, and Management issues.
- 6.2.5 The QAIC and Management representative may also be accompanied by a technical expert if necessary. After the assessment, the QAIC writes the report and assigns the assessment a unique number using the year and sequential number of the assessment (i.e., ERD-XX-YYY). The QAIC sends the report to the other assessors and the assessed individual for an accuracy review and input. Any necessary follow-up is determined and performed.
- 6.2.6 A copy of the final report is sent to the Division Leader, the EPD Assurance Office and all other appropriate individuals. The original report is archived in the QAIC files.
- 6.2.7 The self-assessment is recorded in the ERD Assessment Data spreadsheet maintained by the ERD QAIC.

6.3 Walk-about

ERD performs two levels of walk-about. The first level is performed by the DL or DDL. The second level is performed by the appropriate GL. Both levels are meant to give the DL, DDL, or GL an opportunity to observe and interact with ERD personnel in the work environment. The following steps are the same for both levels of walk-about.

- 6.3.1 One walk-about will be randomly scheduled each month. The walk-about will be scheduled for approximately 1 hour at the Livermore site and up to half a day at Site 300.
- 6.3.2 The DL, DDL, or GL determines what activity or facility will be observed. The GL's walk-about are generally limited to group level activities, whereas the DL/DDL's walk-about may be any Division activity or facility. A single scheduled walk-about visit will generally encompass one ERD facility or field activity, or a group of co-located facilities or field activities.
- 6.3.3 The DL, DDL, or GL notifies the appropriate personnel of a scheduled walk-about.
- 6.3.4 A formal checklist is not used, however, the following goals are kept in mind while performing the walk-about:
 - obtaining first-hand knowledge of work activities from employees
 - gauging ES&H knowledge at the workplace
 - observing Integrated Safety Management in work processes
 - responding to employee questions and concerns
 - observing the condition of facilities and equipment

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- 6.3.5 The DL, DDL, or GL will take notes during the walk-about for use in preparing a summary of observed best practices and items identified for follow-up. This summary will be provided to the appropriate personnel (this may include group leader, project leader, subproject leader, or supervisor as well as to participants of the walk-about). A copy of the walk-about summary will also be forwarded to the EPD Assurance Manager and the ERD QAIC.
- 6.3.6 The ERD QAIC will input the walk-about into the ERD Assessment Data spreadsheet.
- 6.3.7 Any necessary follow-up is determined and performed.

7.0 QUALITY ASSURANCE RECORDS

- 7.1 Self-assessment/walk-about checklists or notes
- 7.2 Self-assessment/walk-about Reports
- 7.3 Self-assessment/walk-about schedules
- 7.4 DefTrack Entries

8.0 ATTACHMENTS

Attachment A—Example Self-assessment Checklist

Attachment B—Example Self-assessment Report

Attachment C—Example Walk-about Report

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Attachment A

Example Self-assessment Checklist

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Name of Treatment Facility & Site ID:

Date of Assessment:

Assessor(s):

TF Operator:

GENERAL

Summarize treatment facility operations.

What readings are recorded?

SAMPLING

What sampling locations are designated in the Permit /Sampling plan?

Are field QC samples taken?

What analyses are performed on the influent/effluent water per the Permit /Sampling Plan?

Are there any deviations from the Sampling Plan?

What is the frequency of sampling performed as outlined in the Permit /Sampling Plan?

How is all sampling documented?

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What sampling containers are used and how are unused sample containers stored?

Are appropriate sample preservation techniques used and documented?

What procedures are used for sample storage, transportation and transfer?

Are labels, shipping documents and COCs completed properly?

Are some chemical analyses performed in the field or on-site? What?

DOCUMENTATION

Is a current permit posted?

What information are collected in controlled logbooks?

Does the TF operator review analytical data?

When does the operator use preliminary data vs. official?

Is the TF operator familiar with the permit limits?

What actions are taken if contaminants are found in the effluent, or outside permit limits?

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How is facility operation communicated?

Is the TF operator familiar with the QIF process?

Have they ever used the QIF process to report nonconformances?

M&TE

What M&TE are used and for what purpose? (obtain model #s)

Does each piece of critical M&TE have a calibration/maintenance logbook and a sticker?

Is the appropriate information documented?

How are the instruments calibrated/verified?

At what frequency?

Are certified standards used and how are they stored?

Is the manufacturer manual available?

ES&H

What hazards does the operator think they work with?

Are acid/base spill kits and eye wash kits available?

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Are the eye washes tested and documented?

Are normal on-site field sampling activities conducted in at least Level-D-protection?

Are any food, drink, or tobacco being used during operations?

Are Material Safety Data Sheets available

Is the Site Safety Plan available?

What training has the TF operator received?

What OSPs are applicable to the facility?

Has the operator participated in the OSP read-through?

Are SOPs available?

Is there a current O&M available?

Is the emergency contact list up-to-date?

Do you participate in safety meetings?

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WASTE

What wastes are generated?

Is equipment decontaminated?

How are the decontamination liquids contained for disposal?

How are wastes disposed of?

MANAGEMENT

Do you feel you play an important role to achieve quality in the work place?

Are you clear about your responsibility and authority in the ERD organization?

Do you feel your supervisor is accessible?

Are your associates supportive?

What are your thoughts on the amount of documentation you prepare?

Is management responsive to provide the necessary resources to do the job?

Have you received adequate training, including On-the-Job Training?

Would the operator feel comfortable stopping unsafe operations?

Are you aware of ISMS? Describe.

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Attachment B

Example Self-assessment Report

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Assessment Number: ERD-99-002

ENVIRONMENTAL RESTORATION DIVISION INTERNAL ASSESSMENT

PTU-10

March 24, 1999

Submitted to Albert Lamarre, Environmental Restoration Division Leader

Assessment Criteria:

The PTU-10 Treatment Facility operations were evaluated against the ERD Treatment Facility Self-assessment checklist. The self-assessment addressed sampling procedure compliance, instrumentation, documentation, environmental health and safety, and management issues.

Assessors:

Judy Steenhoven, ERD

Valerie Dibley, ERD

Interviewee(s):

Brian Mitchell, PTU-10 Facility Operator
Scott Kawaguchi

Assessment Observations:

PTU-10 is a new facility and has been operating for approximately one month. At the time of the assessment, a draw down test was being performed on monitor well MW-359. Well water is pumped through an air stripper and discharged to the storm sewer. The air is run through granular activated carbon and discharged to air. Readings of air stripper, effluent line, and particulate filter pressure and flow, volume of water treated, hours operated, and water level are recorded daily on a log sheet kept in a binder. Water samples are collected from labeled spigots once per week during start-up, then monthly, and quarterly per the permit requirements. A current permit was available at the PTU as well as a site safety plan, SOPs, OSPs, MSDSs, and the facility logbook. No O&M was available at the time of the assessment. Flow rate, water level, number of hours operated, and sampling activities are recorded in the facility logbook. Since sampling was not being performed during the assessment, the related sampling documentation (labels, shipping documents, COCs) were not reviewed. After the assessment, past PTU-10 COCs were reviewed and filled out correctly.

The air samples are analyzed using a Thermo Hydrocarbon Analyzer at the air sample inlet and effluent valve by Scott Kawaguchi once a week. These measurements are recorded in the facility logbook. Presently, Scott is working to comply with the newly distributed measuring and testing equipment procedures described in ERD SOP4.8.

Brian indicated that Scott and Ben Johnson were providing OJT. Documentation of this OJT is not available in Brian's training records. In addition, Brian's training files indicate that Confined Space Entry and Lock and Tag Refresher courses are needed now. If these classes are no longer applicable to Brian's position, his employee training plan should be revised. Brian would like to be trained on the use of the Thermo Hydrocarbon Analyzer.

cc:

B. Bainer	S. Kawaguchi
L. Berg	J. Merrigan
E. Folsom	B. Mitchell
G. Greci	J. Steenhoven

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Attachment C

Example Walk-about Report

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ERD Management Walk-about

When: Thursday, December 9, 1999
 Where: Livermore Site, Treatment Facility B (TFB)
 Staff: Scott Kawaguchi
 Managers: Albert Lamarre, Judy Steenhoven

Scott escorted Albert and Judy to review operations at TFB. Scott pointed out the seven extraction wells which currently feed TFB and explained the modifications both to the extraction well field as well as within the treatment facility over the past few years. Some of the older wells had been replaced with newer better producing wells and the original UV oxidation treatment equipment had been removed and replaced with an air stripping system. Scott showed us the current treatment facility configuration which operates at about 80-85 gpm. Contaminated ground water is run through a series of shallow aeration trays in which volatile organic compounds are stripped from the ground water into a vapor phase. Belsperse is used to prevent scaling in the system. The vapor is routed from the trays through a demister to remove excess moisture and then into two large carbon canisters to capture the volatiles in the air stream before being discharged to the atmosphere in accordance with a BAAQMD air permit. Treated ground water is either directly discharged to an adjacent storm drain or run through columns to remove excess chromium during the winter months prior to discharge. Everything appeared to be well maintained and in good working order. Scott mentioned that he normally attends the facility twice a day to take readings and make sure everything is working properly, the demister is drained of excess water and supplies such as the Belsperse additive are adequate. He pointed out that equipment tends to be dependable and relatively easy to maintain. When asked about possible design changes, he commented that the only improvement he could think of at the moment would be to elevate the demister tank in order to make the draining process easier to accomplish. We also viewed the office area and observed the appropriate documentation was readily available in the office area (e.g., permits, O&M manual, MSDSs) for the operator. We quizzed Scott on what would occur should the electrical power be interrupted. He explained that due to the location of the facility in the buffer zone adjacent to Vasco Road, electrical power is supplied by the local area PG&E supply rather than through the Lab power grid. In the event of a power outage, the facility automatically shuts down and has to be manually restarted which had in fact had occurred earlier in the day. Therefore, there are no substantive concerns related to possible Y2k power outage over the New Year's holiday.

Observations/recommendations: Elevation of the demisting tank should be considered to assess potential improvements both in draining the tank and access for the person performing the task.

Distribution: ERD File "Div Walk-about"
 V. Dibley
 Scott Kawaguchi
 Ed Folsom
 J. Merrigan